**THE UNIVERSITY OF TEXAS AT EL PASO**  
**COLLEGE OF SCIENCE**  
**DEPARTMENT OF MATHEMATICAL SCIENCES**

<table>
<thead>
<tr>
<th>Course #</th>
<th>STAT 5370</th>
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<tbody>
<tr>
<td>Course Title:</td>
<td>Statistical Programming</td>
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<tr>
<td>Credit Hrs:</td>
<td>3</td>
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<td>Term:</td>
<td>Fall 2009</td>
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<tr>
<td>Course Meetings &amp; Location:</td>
<td>Bell Hall Computer Lab, MW 1:30-2:50</td>
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<td>Prerequisite Courses:</td>
<td>Department Approval Required</td>
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<tr>
<td>Instructor:</td>
<td>Amy Wagler</td>
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<tr>
<td>Office Location:</td>
<td>Bell Hall 311</td>
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| Contact Info: | 744-6847  
awagler2@utep.edu  
744-6502  
awagler2@utep.edu  
744-6502 |
| Office Hrs: | TF 10:00-12:00            |
| Textbook(s), Materials: | Required: none  
Suggested: tba |

**Course Objectives** (Learning Outcomes): Introduces students to SAS and R programming. Students will be able to manipulate data, create summary reports and lists, edit and debug code, manage variables, transform and generate data, import and export data, and handle various data formats in R and SAS.

**Course Activities/Assignments:** Each class period will have in-class work completed within the period. Additionally, weekly assignments are given. A final project will be assigned in place of a final exam.

**Assessment of Course Objectives:** A grading rubric will be used for the weekly assignments and final project. Daily class assignments are graded for completeness only.

**Course Schedule:**
- Week 1: Getting Started in SAS; SAS syntax
- Week 2: SAS Data Sets
- Week 3: Reading in Data; Validating and Cleaning Data
- Week 4: Manipulating Data; Combining Data; SAS reports
- Week 5: Input and outputting Data; Processing and Restructuring Data
- Week 6: Combining Data v2; other SAS languages
- Week 7: Extra SAS topics or catch up!
- Week 8: R programming Introduction
- Week 9: Getting Help in R; Installing Packages in R
- Week 10: Vectors, matrices, lists and data frames in R
- Week 11: Reading data and data manipulation in R
- Week 12: R Programming Structures and simulations
- Week 13: R Graphics; R debugging
- Week 14: Final Projects
Grading Policy: 5% In-class assignments
30% Final Project
65% Weekly Homework Assignments

Make-up Policy: If class is missed for a valid and documented reason, the daily in-class assignments may be made-up for full credit. All other assignments should be turned in on time.

Attendance Policy: No formal attendance policy. However, you should attend class to turn in the in-class assignments and weekly homework.

Academic Integrity Policy: Please see http://academics.utep.edu/Default.aspx?tabid=23785

Civility Statement: This is a class where participation is required. You will be seated in front of a computer all class period and you are expected to follow the lecture/discussion and at various times complete in-class assignments. You are not to browse the internet during class time or work on any other class material. If you regularly do not complete in-class assignments in a satisfactory manner, participate in class, or if you work on other material in class you will have points deducted from your In-class assignments portion of your grade.

Disability Statement: If a student has or suspects she/he has a disability and needs an accommodation, he/she should contact the Disabled Student Services Office (DSSO) at 747-5148 or at <dss@utep.edu> or go to Room 106 Union East Building. The student is responsible for presenting to the instructor any DSS accommodation letters and instructions.

Military Statement: If you are a military student with the potential of being called to military service and/or training during the course of the semester, you are encouraged to contact me as soon as possible.